

ABSTRACT

A predetermined pattern of holes h penetrating along the thickness direction are formed in green sheets 11 containing a first dielectric. Successively, by laminating the green sheets 11 having a predetermined pattern of holes h formed therein, a dielectric block 13 having a predetermined pattern of openings arrayed periodically is obtained. In the openings of the dielectric block 13, a second dielectric is arrayed. Consequently, without necessitating particularly complicated steps, it is made possible to obtain a photonic crystal in which the first dielectric and the second dielectric different in relative dielectric constant from the first dielectric are periodically arrayed. By using a dielectric ceramic for each of the first and second dielectrics, a compact and high-performance photonic crystal can be obtained. Alternatively, the first and second dielectrics may be a dielectric ceramic and air, respectively.